

MACHACEK, F.; VANEK, J.

How to improve the design of tractors with regard to safety precautions.
p. 11. (ZEMEDEL'SKE STROJE, Vol. 2, No. 1, Jan 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

MACHACEK, F.

Seats in agricultural machines. p.65.
(Sbirka Vynalezu, Vol. 6, No. 4, Apr. 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) IC. Vol. 6, No. 9, Sept. 1957. Uncl.

MACHACEK, F.

World contest in plowing.

P. 459 (Mechanizace Zemedelstvi) Vol. 7, No. 20, Oct. 1957- Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC. - VOL. 7, NO. 1, JAN. 1958

MACHACEK, Frantisek, inz.

Help of technical standards in industrial protection and
safety in agriculture. Normalizace 11 no.9:297-300 S '63.

1. Vyzkumny ustav zemedelske techniky, Repy.

MACHACEK, Frantisek, inz.

Consumption of electric power in supplementary spray irrigation.
Energetika Cz 14 no.11:550-555 N '64.

1. Research Institute of Agricultural Technology, Rapy near
Prague.

CZECHOSLOVAKIA

MACHACEK, H.; KOCHLOEFL, K.; KRAUS, M.

Institute of Chemical Process Fundamentals, Czechoslovak Academy
of Sciences, Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 2,
Feb 1966, pp 576-585

"Catalytic dealkylation of alkylaromatic compounds. Part 15:
The effect of the structure of alkylnaphthalenes on the rate
of their hydrodealkylation on a nickel catalyst."

MACHACEK, Ivan, inz.

Analysis of household power consumption. Energetika 14
no. 4: 171-173 Ap '64.

1. TPR, Prerov.

MACHACEK, J.

Increasing the quality of cotton yarns by new methods of management. p. 127.

TEXTIL. (Ministerstvo lehkého průmyslu) Praha, Czechoslovakia. Vol. 14,
no. 4, April 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11,
November 1959.

Uncl.

Machacek, J.

Activities of the office of the editor of publications on building construction in the Publishing House of Technical Literature. p. 118. INZENYRSKE STAVBY. (Ministerstvo stavebnictvi) Praha. Vol. 2, no. 3, Mar. 1954.

Source: EFAL LC Vol. 5, No. 10 Oct. 1956

MACHACEK, J.

Regulation of water quality in industry.

p. 7
Vol. 5, no. 1/2. Mar. 1955
VODNI HOSPODARSTVI
Praha

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 5, no. 3
March 1956

Machacek, J.

Activities of the office of the editor of publications on building construction in SNTL (State Publishing House of Technical Literature). p. 34. INZENYRSKE STAVBY. (Ministerstvo stavebnictvi) Praha. Vol. 4, no. 1, Jan. 1956.

Source: EEAL LC Vol. 5, No. 10 Oct. 1956

MACHACEK, J.

MACHACEK, J. Activities of the office of the editor of publications on building in the State Publishing House of Technical Literature during 1956. p. 34 Vol 5, no. 1. Jan. 1957
INZENYRSKE STAVBY. (Ministerstvo stavebnictvi)
Praha, Czechoslovakia

SOURCE: EAST EUROPEAN ACCESSIONS LIST (EEAL) VOL 6 NO 4 APRIL 1957

MACHACEK, J.

Some new successful building machines and equipment.

P. 659. (INZENYRSKE STAVBY.) (Praha, Czechoslovakia) Vol. 5, No. 12, Dec. 1957

SO: Monthly Index of East European Accession (EEAI) LC. Vol. 7, No. 5, May 1958

MACHACEK, Jan, inz.

Editorial activities of the Section on Building of the State
Publishing House of Technical Literature in the year 1957.
Inz stavby 6 no.1:41-42 Ja '58.

1. Statni nakladatelstvi technicke literatury, Praha.

NEMECEK, R.V., inz; PROCHAZKA, L., inz; MACHACEK, J., inz.

Conference on vibration technology. Inz stavby 11 no.11:
Suppl: Mechanizase no.11:175-176 N'63.

MACHACEK, Jan, inz.

Successful conference on new technology in the Konstruktiva
National Enterprise. Poz stavby 11 no. 12: 679 '63.

MACHACEK, Jan, inz.

Conference on the new technology in the Konstruktiva
National Enterprise in Cholin. Inz stavby 12 no.1:47-48
Ja'64.

1. Ministers'vo stavebnictvi.

MACHACEK, Jaroslav, inz.

Technical and economic indexes of reservoir dams. Vodni hosp
13 no.3:117-119 '68.

1. Riaditelstvo vodohospodarskeho rozvoja, Bratislava.

MACHACEK, Jaroslav, inz.

Technical and economic indexes of water reservoirs. Vodni hosp
13 no.4:156-159 '63.

1. Riaditelstvo vodohospodarskeho rozvoja, Bratislava.

MACHACEK, Jindrich, inz.; SOUCEK, Jaroslav, inz.; BINOVEC, Vladimir, inz.

Geodetic operations designing new and reconstructed rail-
roads. Geod kart obzor 9 no.12:327-332 D'63.

1. Statni ustav dopravnih projektovani, Praha.

MACHACEK, K.

Proximus, a new sealautomatic portable-coloring apparatus. p. 335.

JEMIA MECHANIKA A OPTIKA (Ministerstvo presneho strojirenistvi a slay pro
vyzkum optiky a jemne mechaniky) Praha, Czechoslovakia Vol. 6, no. 12, (Oct. 1959)

Monthly List of East European accession, (EMAI), IC, Vol. , No. 12, Dec. 1959
Uncl.

MACHACEK, K.

MACHACEK, K.

Semiautomatic portable-enlarging apparatus proximus. p. 106L

TECHNICKA PRACA. (Rada vedeckych technickych spoločností pri Slovenskej
akademii vied) Bratislava, Czechoslovakia, Vol. 11, no. 12, Dec. 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 9, no. 1, Jan, 1960

Uncl.

BARTEK, Z., inz.; MACHACEK, K.; SEKERA, J.

Professional magnifying apparatus Agrand. Jemna mech opt. 8
no.9:295-300 S*63.

MACHACEK, M.

Effect of raw materials on the elasticity of knit goods. p. 174.

(Textil. Vol. 12, no. 5, May 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

MACHACEK, M.

Medical electronic apparatus and the patents. Slaboproudy
obzor 23 no.6:365 Je '62.

MACHACEK, M.

Optimalization of production processes. Slaboproudy obzor 23
no.11:664-665 H '62.

MACHACEK, M.; PRUSEK, J., inz.

Automatic control of rinsing equipment. Strojirenstvi 13 no.1:
32-38 Ja '63.

1. Statni vyzkumny ustav ochrany materialu, Praha.

MACHACEK, M.; PRUSEK, J.

Control of the insulation layer thickness of piping. Paliva
44 no.1:9-10 Ja'64.

1. Statni vyzkumny ustav ochrany materialu, Praha.

BAHENSKY, V.; MACHACEK, M.; PRUSEK, J.

Reduction of water consumption in surface finishing industries.
Vodni hosp 13 no.6:224-226 '63.

1. Statni vyzkumny ustav ochrany materialu, Praha.

MACHACEK, M.; PRUSEK, J.

Transistor level indicator. Automatizace 7 no.11:297-299 N '64.

1. G.V.Akimov State Research Institute of Material Protection,
Prague.

MACHACEK, M.

Etiology and therapy of leg ulcers. Rozhl. chir. 31 no. 9:249-253
1952. (CJML 23:3)

1. Of the Surgical Department (Head--Docent A. Furst, M. D.) of
Benesov State Hospital.

MACHACEK, M.; SKOPCOVA, J.

Cyst of greater omentum caused by sudden abdominal trauma. Rozhl. chir.
37 no.2:140-142 Feb 58.

1. Chirurgické a dětské oddělení nemocnice Benesov u Prahy, přednosta
doc. Dr. Furst a Dr. V. Petricek. M.M., Pisek, Raisova 1387.

(OMENTUM, cyste
traum., of greater omentum in child, surg. (Cz))

KRATOCHVIL, L.; MACHACEK, M.

Craniocerebral injuries in children resembling extracerebral hematomas.
Acta chir. orthop. traum. cech. 26 no.2:108-110 Mar 59.

1. Neurologické oddělení OUNZ Písek, přednosta MUDr. L. Kratochvíl Chirurgické oddělení OUNZ Písek, přednosta MUDr. M. Macháček.

(BRAIN, wds. & inj.

craniocerebral inj. in child., differ. diag. from extracerebral
hematoma (Cz))

(HEMATOMA, in inf. & child

extracerebral hematoma, differentiation from craniocerebral
inj. (Cz))

MACHACEK, Miroslav; PETRIK, Radko

Epidural anesthesia in urology. Rozhl. chir. 38 no.9:643-646 S '59

1. Chirurgické odd. ONZ Písek, přednosta MUDr. M. Machacek.
(ANESTHESIA SPINAL)
(UROGENITAL SYSTEM, surg.)

RYCHLIK, E. [deceased]; SUSS, A.; MACHACEK, M.

Unusual successful operation after injury and suture of the heart. Rozhl. chir. 44 no.1:42-44 Ja '65

1. Chirurgické a interní oddelení Obvodního ústavu národního zdraví v Písku.

L 34921-66 EWP(t)/ETI IJP(c) JD

ACC NR: AP6026584

SOURCE CODE: CZ/0057/65/000/008/0344/0347

AUTHOR: Kachacek, Mirko; Prusek, Jaroslav (Engineer)

ORG: SVUOH, Prague

TITLE: Automatic regulation of the composition of pickling acids

SOURCE: Hutnik, no. 8, 1965, 344-347

TOPIC TAGS: pickling, automatic regulation, metallurgic machinery

ABSTRACT: The performance of the pickling bath is influenced by two components in the bath: free acid and the salts of the metals dissolved in the bath. The authors describe an automatic regulator of the composition of the bath produced in Czechoslovakia, and marketed under the trade name "Mela". Details of the construction of the apparatus are described. Temperature, conductivity, and density of the solution are recorded; the evaluation is made automatically from the inputs fed to the analyzer in the form of electrical impulses. The apparatus has three regions of operation: 170-220 g/l H_2SO_4 and 0 - 60 g/l Fe; 250 - 300 g/l acid, and 0 - 60 g/l Fe; and 40 - 100 g/l of acid and 0 - 40 g/l of Cu. There are two ways in which the bath can be controlled: either the acid is added continuously, and the bath is periodically regenerated, or a slip stream of the bath is regenerated continuously. Orig. art. has: 4 figures. [JPRS]

SUB CODE: 13 / SUM DATE: none / ORIG REF: 001 / SOV REF: 001

OTH REF: 006

Card 1/1

MAKHACHEK, M. [Machacek, M.]; PRUSHEK, I. [Prusek, J.]; TSTIBOR, K. [Ctibor, K.]

Transistorized level indicator; from the practice of instrument
manufacture in Czechoslovakia. Priborostroenie no.11:22-25 N '64.
(MIRA 18:1)

MACHACEK, P.

SOVA, J.; JEZEK, V.; MACHACEK, P.

Hypertension & myocardial infarct. Cas. lek. cesk. 97 no.21:662-668
23 May 58.

1. II. interni klinika, prednosta prof. MUDr Frantisek Herles.
Adres. autora: J. S. Praha 2, U nemocnice 2.
(HYPERTENSION, statist.
in myocardial infarct (Cz))
(MYOCARDIAL INFARCT, statist.
with hypertension (Cz))

CZECHOSLOVAKIA

ZAJICEK, F., MD, and MACHACEK, P., Department of Internal Medicine (Interni oddeleni), Hospital in Jablonne v Podjestedi, F. LAJICEK, MD, director.

"Familial Hypercholesterolaemic Xanthomatosis (Case History With a Complicating Myocardial Infarction)"

Prague, Casopis Lekaru Ceskych, Vol CII, No 31, 5 August 1963, pp 351-352.

Abstract [Authors' English summary, modified]: Report on a group of five members of a family with hypercholesterolaemia. In two men a typical tendon xanthomatosis was present, including arterial hypertension. Laboratory tests were typical for FHx, the serum was pure, there was a typical rise in beta lipoproteins and phospholipids, and a normal ratio of free and esterified cholesterol. There was only a mildly increased cholesterol level in three children under 12 years of age like in the most FHx cases recorded in childhood. One man with xanthomatosis, whose father died of myocardial infarction, developed an acute myocardial infarction. Findings ruled out a familial hyperlipaemia and secondary hypercholesterolaemia. The possible presence of FHx or other disorders in the lipid metabolism should be considered in all cases of the ischaemic heart disease in younger people; in 1/2

CZECHOSLOVAKIA

Prague, Časopis Lékařů Ceských, Vol CII, No 31, 5 August 1963,
pp 651-655.

dermatological, tendon, and other PHX manifestations the increased
incidence of coronary diseases should be taken into account.
Twenty-four references, including 3 Czech.

2/2

- 2 -

MACHACEK, P.

Observations on preventive medicine. Cas. lek. Cesk. 104 no.48:
1328-1329 3 D '65.

1. Internista polikliniky Votice.

MACHACEK, S.

Fibrous insulation materials in the member states of the
Council for Mutual Economic assistance. Stavivo 42 no. 3:
83 Mr '64.

1. Stavebni izolace National Enterprise, Prague.

MACHACEK, STEPAN

Czechoslovakia

CA:47:11725

"The dry distillation of wood."

Chemie (Prague) 8, 88-90 (1952)

MACHACEK, V.

Measuring boreholes by the radioactive logging method.

P. 331. (UHLI.) (Praha, Czechoslovakia) Vol. 7, No. 10, Oct. 1957

SO: Monthly Index of East European Accession (EAI) LC. Vol. 7, No. 5, 1957

MACHACEK, V.

Use of water in nuclear power stations. p. 30. (Voda, Vol. 36, No. 2, Feb 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAI) LC, Vol. 6, No. 8, Aug 1957. Uncl.

MACHACEK, V.

CZECHOSLOVAKIA/Physical Chemistry. Thermodynamics. Thermo-chemistry. Equilibria. Physical-Chemical Analysis. Phase Transitions. B

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 73264.

Author : Josef Cepelak, Jaromir Maly, Vojtech Machacek.

Inst :

Title : Extraction of Uranyl Nitrate by Diethyl Ether from Water - Nitric Acid - Ammonium Nitrate Solutions.

Orig Pub: Chem. listy, 1957, 51, No 2, 2195-2199.

Abstract: The authors established the equilibrium distribution of uranyl nitrate (I) between aqueous HNO_3 solution and diethyl ether (II) in the presence of NH_4NO_3 . The distribution was different at HNO_3 concentrations of 1 and of 5 n. Based on the study of the equilibrium of absorption spectra of the two phases and of the

Card : 1/2

CZECHOSLOVAKIA/Physical Chemistry. Thermodynamics. Thermo-chemistry. Equilibria. Physical-Chemical Analysis. Phase Transitions.

B

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 73264.

course of the curve of the liquid phase melting, it is assumed that at the extraction of I with II from 5 n. HNO_3 , uranium is in the aqueous phase as $\text{U}_2\text{O}_5^{2+}$, and in the organic phase it is as a complex with a $\text{UO}_2(\text{NO}_3)_3^-$ ion. The exact equation of the equilibrium reaction on the dividing border of both the phases could not be determined in consequence of the difficulty to determined HNO_3 bound with II and with I in the organic phase.

Card : 2/2

CZECHOSLOVAKIA/Chemical Technology

Maty Jaromir, Machacek Vojtech H-7
Chemical Products and

Their Application. Chemical-technological
Problems of Nuclear Engineering.

Abs Jour : Ref Zhur - Khimiya, No 17, 1958, 57921
Author : Maly Jaromir, Machacek Vojtech, Kutzendorfer Jaroslav,
Kourim Vaclav
Inst : -
Title : The Extraction of Metallic Uranium.
Orig Pub : Jaderna energie, 1958, 4, No 1, 9-18
Abstract : Investigation on the extraction of metallic U under labo-
ratory conditions were conducted in 1954-1955. A tech-
nological plan for the extraction of U of reactor purify
(under Czechoslovakian conditions) is cited. $UO_2(NO_3)_2 \cdot$
 $6H_2O$ is extracted from a concentrated solution of
sulfuric ether, then extreacted once more with water;
500 ml of a solution of uranyl nitrate (pH 2) is heated to
boiling, and 500 ml of a 3% solution of H_2O_2 is added.

Card 1/2

- 10 -

MACHACEK, V.; PASTYR, M.; CHOCHLOVSKY, I.

"Description of the house of the physical laboratories at the Institute of Nuclear Physics of the Czechoslovak Academy of Sciences."

JADERNA ENERGIE. Praha, Czechoslovakia. Vol. 4, no. 9, Sept. 1958

Monthly list of East European Accessions (EEAI), LC, Vol. 3, No. 6, Jun 59, Unclass

SOV/89-5-2-16/36

AUTHORS: Chodura, B., Landspersky', G.,
Macha'ček, V., Maly', Y. (Praha)

TITLE: On the Production of U_3O_8 Crystals and the Investigation of Their
Structure (Polucheniye kristallov U_3O_8 i izucheniye ikh struktury)

PERIODICAL: Atomnaya energiya, 1958, Vol. 5, Nr 2, pp. 181-183 (USSR)

ABSTRACT: The influence exercised by uranium initial materials and the con-
ditions of their precipitation, temperature and time of thermal
treatment upon the amount and the state of U_3O_8 were investigated.
Uranyl nitrate, ammonium uranate and uranium peroxide served as
initial material for the representation of U_3O_8 . The thermal treat-
ment of uranium salts (the weighed portion amounted to 5 - 200 g)
was carried out at 1 110°C in the course of 5 hours, 48 hours, and
7 days.
For the accurate X-ray determination of the crystals it was
necessary that the samples consisted of crystals of the same order
of magnitude. A sedimentation in water took place; 5 g of each
preparation was sedimented in 5 fractions and various times
(10 sec, 2 min, 30 min and 24 h). X-ray pictures were made by the

Card 1/2

On the Production of U_3O_8 Crystals and the
Investigation of Their Structure

SOV/89-5-2-16/36

method of inverse pictures. The distance between film and sample amounted to 30 mm; time of exposure: 1 hour. No crystals investigated have a hexagonal structure, as is assumed by some authors (Ref 9), but are of a rhombic structure. Some of these crystals show weak, layer-like lines which are indicative of a threefold periodicity with the distance $3a$. However, also weak lines were found which indicate a two-fold periodicity with the distance $2c$. There are 12 figures, 3 tables, and 10 references, 2 of which are Soviet.

SUBMITTED: March 24, 1958

Card 2/2

CZECHOSLOVAKIA / Physical Chemistry. Thermodynamics. B
Thermochemistry. Equilibris. Phase
Changes. Physico-chemical Analysis.

Abs Jour : Ref Zhur - Khimiya, No 12, 1959, No. 41612

Author : Cepalek, J.; Maly, J.; Machacek, V.

Inst : Not given

Title : Extraction of Uranyl Nitrate with Diethyl
Ether from Water - Nitric Acid - Ammonium
Nitrate Solutions

Orig Pub : Collect. czechosl. chem. commun., 1958,
23, 1509-1514

Abstract : No abstract given. See Ref Zhur - Khim,
1958, No 22, 73264

Card 1/1

CZECHOSLOVAKIA/Chemical Technology - Processing of Solid
Fossil Fuels.

H-22

Abs Jour : Ref Zhur- Khimiya, No 24, 1958, 82958

Author : Machacek, V., Machek, V.

Inst : -

Title : Dry Distillation of Coal with an Addition of a By-Product
Formed in the Hydrogenation Process.

Orig Pub : Paliva, 1958, 38, No 3, 85-86.

Abstract : An industrial experiment is described concerning the introduction of an additive by-product, formed during the hydrogenation (BPH), (see R. Zh. Khim., 1958, 26451) to a composition of a charge prior to charging the gas plant chambers. Data are cited which demonstrate the effectiveness of the BPH addition: the introduction of 5.5% of BPH increased the oven capacity in respect of gas by 20.2%, the gas yield from the coal to 13%, the H₂ content in the gas to 40%.

Card 1/1

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MACHACEK, V.

Preparation of crystals of U_3O_8 and investigation of their structure. B. Chodura, H. Landsperky, V. Machacek, and J. Maly (Czech. Acad. Sci., Prague). *Ann. Chim. (Milan)* 1, 101-4 (1959).—The oxide is formed by decomposition of uranyl nitrate, ammonium diuranate, or uranidium peroxide at temps. between 745 and 946°. It is then heated to 1000° for some days to enlarge the crystals. This method gives crystals up to 10 μ in diam. Their structure is hexagonal, the main lattice having parameters $a = 3.94$ kX, $b = 6.717$ kX, $c = 4.14$ kX. Another lattice of, about $1/2$ the intensity of the main one, has parameters of 3.87, 6.925, and 4.14 resp. N. Corcoran

4E2C

st

COUNTRY : Czechoslovakia H-6
 CATEGORY : Chemical Technology. Chemical Products and Their
 Applications--Safety and sanitation. 75554
 ABS. JOUR. : RZKhim., no. 21 1959, no.
 AUTHOR : Macnecok, J., Hubacek, M., Kos, E., Panyr, M., and
 R. M. : Not given
 TITLE : Layout of a Radiochemical Laboratory for Work
 with Substances of Medium and High Radioactivity
 ORIG. PUB. : Jaderna Energie, 5, No 2, 55-60 (1959)
 ABSTRACT : The layout of the physical chemistry laboratory
 at the Nuclear Physics Institute, currently under
 construction in the Czech Peoples Republic,
 is described. The work of the laboratory will
 involve substances of medium and high alpha,
 beta, and gamma activity. The laboratory is di-
 vided into four sections, depending on the degree
 of radioactivity of the substances to be handled.
 The first section comprises the 'hot' laboratory
 for work with substances of very high activities.
 CARD: 1/4 *Weber, M.

COUNTRY : Czechoslovakia
CATEGORY :

H-6

ABE. JOUR. : RZKhIE., No. 21 1959, No.

75334

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : This section contains insulated pits in which all operations involving radioactive substances are carried out with remote-controlled manipulators. The laboratory is divided into a zone of unconditioned activity [sic] (inner part of pit), a zone of conditioned activity, and a safe zone. A second section comprises the 'semi-hot' laboratory for work with substances having beta and gamma activities of the order of 5 curies per hood. This laboratory is also subdivided into

CARD: 2/4

170

COUNTRY : Czechoslovakia
CATEGORY :

H-6

ABS. JOUR. : RZKhim., No. 21 1959, No.

75334

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : corresponding zones [sic] and the materials are handled with manipulators. A third laboratory for radiochemical investigations is located between the 'semi-hot' laboratory and the laboratory for work with pure alpha particles. Safety procedures have been worked out for the protection of the personnel in the above-indicated laboratories. The transport of the radioactive materials and the removal of the radioactive wastes are carried out with special remote-controlled apparatus. The pits are separated from

CARD: 3/4

MACHACEK, V.

New problems in waste disposal. Jaderna energie 6 no.9:318 S '60.

MACHACEK, Vaclav

Szomolnokite from the Cheb Basin. Cas min geol 7 no.3:269-272 :62.

1. Ustredni ustav geologicky, Praha 1, Hradebni 9.

MACHACEK, V.

Research on heating gas production by gasification of heavy
crude oil residues and tar. Prace Ust paliv 6:73-106 '63.

KNOR, F.; MACHACEK, Vl.; BOHM, Vlad.

Continuous city gas production from hydrocarbons on a
circulating heat transmitter. Paliva 44 no.5/6:159-161
My-Je '64.

1. Research Institute of Fuels, Bechovice.

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																																																			
<i>ca</i> 28 Adamantane, a new hydrocarbon extracted from petroleum. S. LANDA AND V. MACULAK. <i>Collection Czechoslov. Chem. Communications</i> 5, 1-5(1933).—Adamantane was isolated by chilling to -80° the aromatic fraction of Hodonin petroleum b. 190-5°. It has the empirical formula $C_{10}H_{16}$, n_D^{20} 1.568, d. 1.07, mol. heat of combustion 1,451.7 Cal.; it m. 268° in a sealed tube and has a camphor odor. Hot HNO_3, chromic acid and alk. $KMnO_4$ do not attack it; concd. H_2SO_4 causes carbonization. The crystals are isometric and x-ray studies indicate two different types of C linkage. The structure <i>tricyclo[3.3.1.0.1.2]decane</i> is therefore assigned. A. F. SHEPARD																																																			
ASB-3LA METALLURGICAL LITERATURE CLASSIFICATION																																																			
1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									

MACHACEK, V.

"Economic Study on Supplying Industrial Plants with Water," p. 76.
(Voda, Vol.33, No.3, Mar. 1953, Praha.)

SO: Monthly List of East European Accessions, Vol.2, No.9, Library of Congress, September
1953, Uncl.

MACHACEK, V.

"We Must Improve the Situation." p. 250 (VODA, Vol. 33, No. 10, Oct. 1953) Praha, Czechoslovakia

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 4, April 1954. Unclassified.

MACHACEK, V.

Human influence on the natural water circulation. p. 26.

Vol. 4, no. 1, Jan. 1954
VODNI HOSPODARSTVI
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No. 3, August 1956

MACHACEK, V.

An important measure to secure an economical supply of water for the development of the country. p. 122.

Vol. 4, no. 4, Apr. 1954
VODNI HOSPODARSTVI
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No. 8, August 1956

MACHACEK, V.

For over-all solution of problems of water economy. p. 333.
VODNI HOSPODARSTVI. Vol. 4, no. 11, Nov. 1954.

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 5, No. 6, June 1956 Uncl.

MACHACEK, V.

Water evaporation in industry. p. 149. VODNI HOSPODARSTVI. (Ustredni sprava vodniho hospodarstvi) Praha. Vol. no. 6, June. 1956.

SOURCE: East European Accessions List, Vol. 5, no. 3, September 1956

PACHACEK, V.

Suitable water supply in industry. p. 107.

Vol. 35, no. 4, Apr. 1956

VODA

Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No. 2, August 1956

25(5);14(6)

PHASE I BOOK EXPLOITATION CZECH/2524

Macháček, Václav, Engineer

Chladicí voda v průmyslu (Cooling Water in Industry) Praha,
Státní Nakladatelství Technické Literatury, 1959. 182 p. 2,200
copies printed.

Reviewers: Jar. Bulíček, Doctor, Engineer; Jan Trepesch, Engineer;
and Jan Zemánek, Engineer; Ed.: Jindřich Choleva, Engineer;
Tech. Ed.: Vladislav Lacina; Managing Ed. for Literature on
Civil Engineering: Jan Macháček, Engineer.

PURPOSE: The book is intended for engineers working with industrial
water supply, water-piping designers, and civil engineers. It
may also be useful to students of trade and technical schools.

COVERAGE: The book discusses the principles of water facilities in
industrial plants. The functions of such cooling devices as
cooling ponds, spray ponds, and cooling towers are explained, and
comparisons are presented. Economy of design is also discussed.
No personalities are mentioned. There are 21 references: 9
German, 6 Czech, 4 Soviet, 1 French, and 1 Italian.

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Cooling Water in Industry

CZECH/2524

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CZECH/2524

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AVAILABLE: Library of Congress (TD353.M37)

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11-13-59

Card 5/5

MACHACEK, V.

"Change of the law of water management." p. 193.

VODNI HOSPODARSTVI. (Ustredni sprava vodniko hospodarstvi), Praha,
Czechoslovakia, No. 5, May 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Uncla.

MACHACEK, V.

Common industrial water-supply systems. p. 251.

VODNI HOSPODARSTVI. (Ministerstvo energetiky a vodniho hospodarstvi
a Vedecka technicka spolecnost pro vidni hospodarstvi) Praha,
Czechoslovakia, No. 6, June 1959.

Monthly List of East European Accession (EEAI), LC Vol. 9, no. 2,
Feb. 1960.

Uncl.

MACHACEK, V.

Fiberglass tubing. p. 375.

VODNI HOSPODARSTVI. (Ministerstvo energetiky a vodniho hospodarstvi a
Vedecka technicka spolecnost pro vodni hospodarstvi) Praha, Czechoslovakia.
No. 9, Sept. 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11,
November 1959.

Uncl.

MACHACEK, Vaclav, inz.

Management of water resources in Czechoslovakia. Vodni hosp
no.9:366-368 S '62.

1. Ministerstvo zemedelstvi, lesniho a vodniho hospodarstvi.

1. The following and history of the ...
2. The ...
3. The ...
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10. The ...

MACHACK, V

MACHACEK, V.

CZECHOSLOVAKIA

MACHACEK, V.

Central Geological Institute (Ustredni ustav geologicky), Prague

Prague, Vestnik Ustredniho Ustavu Geologickeho,
No 2, 1963, pp 81-87

"Importance of Sorbed Cations in the Geochemical
Investigation of the Cheb Basin."

MACHACEK, V.; SULCEK, Z.

Total chemical analysis of the mineral waters from Hot Spring II
in Karlovy Vary. Fyziat vestn. 43 no.1:45-51 F '65.

1. Ustredni ustav geologicky, Praha.

Category: Czechoslovakia / Physical Chemistry
Thermodynamics. Thermochemistry. Equilibrium. Physico-
chemical Analysis. Phase transitions.

B-8

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 29960

Author : Machacek Z., Lanikova J. Makarek

Inst : not given

Title : Solubility of Vinyl Chloride in Organic Solvents

Orig Pub: Chem. listy, 1954, 48, No 2, 276-279

Abstract: Determination of the solubility of $\text{CH}_2=\text{CHCl}$ in tetrahydrofuran, $\text{HCON}(\text{CH}_3)_2$, CH_2CHCl_2 and methyl cyclohexanone, by means of a special apparatus and in accordance with the method of a liquid film passing through a gas. The results obtained at 20, 30, 40, 50° are tabulated.

Card : 1/1

-81-

7

3

Copolymerization of vinylidene chloride and butyl acrylate
copolymerization parameters. Zdeněk Macháček
 (Výzkumný Ústav Plastičtých Hmot, Gottwaldov, Czech.)
 Chem. Listy 48, 477-82 (1954). — The radical-initiated copolymerization of $\text{CH}_2=\text{CCl}_2$ (I) and $\text{CH}_2=\text{CHCO}_2\text{Bu}$ (II) in block at 70° and in emulsion at 0° was investigated. The copolymerization parameters (cf. Mayo and Lewis, C.A. 38, 6427°) have been evaluated: $r_1 = 0.84 \pm 0.2$; $r_2 = 0.46 \pm 0.13$ in the block copolymerization and $r_1 = 0.87 \pm 0.01$, $r_2 = 0.58 \pm 0.03$ in the emulsion copolymerization. The phys. consts. of the monomers used were: b.p. 31.7° (I) and 145.8° (II); n_D^{20} 1.4250-1.4260 (I) and 1.4192-1.4195 (II). The app. for the emulsion polymerization is described.
 E. Erdős

10-15-54

ml

MACHÁLEK, ZDENĚK

// Block polymerization of vinylidene chloride. Zdeněk Machálek (Výzkumný ústav plastických hmot, Gottwaldov, Československo). *Chem. Listy* 49, 1448-53 (1955).—The kinetics of block polymerization of $\text{CH}_2=\text{CCl}_2$ at 40–60° and at initial concn. 0.04–0.78 mole % have been investigated. The over-all reaction rate is proportional to the square root of the initial concn. and temp. The anomalous increase of the over-all reaction rate in the initial stage of block polymerization depends on the concn. of the polymer present.

R. Erdős

MEI

МАЧНАЕК, Г.

PHASE I BOOK EXPLOITATION 50V/1983

International symposium on macromolecular chemistry. Moscow, 1960.

Международный симпозиум по макромолекулярной химии, СССР, Москва, 14-18 июня 1960 г. Доклады и статьи. Секция II. (International Symposium on Macromolecular Chemistry held in Moscow, June 14-18; Papers and Summaries) Section II. [Moscow, Izdat. AN SSSR, 1960] 599 p. 5,500 copies printed.

Sponsoring Agency: The International Union of Pure and Applied Chemistry, Commission on Macromolecular Chemistry

Tech. Ed.: T.A. Prusakov.

PURPOSE: This book is intended for chemists interested in polymerization reactions and the synthesis of high-molecular compounds.

CONTENTS: This is Section II of a multivolume work containing papers on macromolecular chemistry. The papers in this volume treat mainly the kinetics of various polymerization reactions initiated by different catalysts or induced by radiation. Among the research techniques discussed are electron paramagnetic resonance spectroscopy and light-scattering interpolation. There are summaries in English, French and Russian. No personalities are mentioned. References follow each article.

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Кришна, С., and А. Кефлик (Czechoslovakia). On the Role of Nonpolar Compounds in the Cationic Polymerization of Isobutylene 272

45

MACHAČEK Z.

PLANE I BOOK EXPLANATION NOV/1985

International symposium on macromolecular chemistry. Moscow, 1960.
 Mashinostroyeniye po makromolekulyarnoy khimii. SSSR, Moskva, 14-18 iyunya
 1960 g. doklady i referaty. Sbornik II. (International Symposium on
 Macromolecular Chemistry Held in Moscow, June 14-18, 1960. Papers and Summaries)
 Section II. [Moscow, Izd-vo AN SSSR, 1960] 559 p. 5,500 copies printed.
 Sponsoring Agency: The International Union of Pure and Applied Chemistry, Com-
 mission on Macromolecular Chemistry
 Tech. Ed.: T.A. Prusheva.

REMARKS: This book is intended for chemists interested in polymerization re-
 actions and the synthesis of high-molecular compounds.

CONTENTS: This is Section II of a multivolume work containing papers on macro-
 molecular chemistry. The papers in this volume treat mainly the kinetics of
 various polymerization reactions initiated by different catalysts or induced
 by radiation. Among the research techniques discussed are electron paramagnetic
 resonance spectroscopy and light-scattering interpolation. There are sum-
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Z/009/60/010/05/011/040
E112/E153

AUTHORS: Z. Macháček and Z. Laita

TITLE: Laboratory Purification of Ethylene

PERIODICAL: Chemický Průmysl, 1960, Vol 10, Nr 5, pp 251-252

ABSTRACT: A laboratory method for the purification of technical ethylene is described. The purified compound was analysed by chromatographic method. Its impurities were less than 0.01% and did not show an inhibition period in free radicle polymerisations. A diagram of the assembly of equipment is given. The method of purification is as follows. Technical ethylene is passed through an aqueous solution of potassium hydroxide, followed by passage through a purifying column containing a solution of cuprous chloride, ammonium chloride and copper shavings. It is then led through a column of concentrated sulphuric acid, anchored on silica gel. The final passage is through columns of silica gel with carbon dioxide as carrier and flow determining factor. The final purification was carried out by gas chromatography using again carbon dioxide as carrier. It is claimed that completely reproducible results were obtained. The course of the

Card
1/2

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E112/E153

Laboratory Purification of Ethylene

chromatographic separation is illustrated by a graph.
There are 2 figures and 5 Czech references.

ASSOCIATION: Výzkumný ústav makromolekulární chemie, Brno
(Research Institute of Macromolecular Chemistry,
Brno)

Card 2/2

SUBMITTED: April 1, 1959

MAKHACHEK, Z. [Machacek, Z.]; MEYZLIK, Y. [Mejzlik, J.]; PATS, Y. [Pac, J.]

Anionic polymerization of formaldehyde. Part 1. Vysokom.soed. 3
no.9:1421-1426 S '61. (MIRA 14:9)

1. Nauchno-issledovatel'skiy institut makromolekulyarnoy khimii
Brno, Chekhoslovakiya.
(Formaldehyde) (Polymerization)

37446

S/190/62/004/005/023/026

B145/B101

15.8090

AUTHORS: Mejzlik, J., Menčíkova, J., Machaček, Z.

TITLE: Anionic polymerization of formaldehyde. II

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 5, 1962, 769-775

TEXT: In continuation of a previous paper (Vysokomolek. soyed., 3, 1421, 1961), the authors studied the polymerization of saturated formaldehyde solutions in diethyl ether at -59.3°C . The molecular weight of the polymers was determined from viscosity measurements in the solvent mixture tetrachloro ethane - phenol (3 : 1) at 90°C . The time dependence of the formaldehyde concentration shows that the order of reaction is higher as referred to the monomer and increases during the reaction. Therefore, only the initial rates in the first 2 min, reaction of second order were taken into consideration. The molecular weight changes very little up to a 40-60% conversion, and then decreases. Tetrabutyl ammonium laurate (TBAL), dibutyl amine (DBA), and tributyl amine (TBA) were used to study the effect of catalysts. With TBAL, the reaction was of the order of 0.8 as referred to the catalyst (the catalytic effect increased after TBAL had

Card 1/3

Anionic polymerization of ...

S/190/62/004/005/023/026
B145/B101

been stored for some time), and with DBA and TBA it was of the order of 1. Only a small portion of the catalyst is required for initiation. The ratio between the catalytic efficiencies (reaction rate/catalyst concentration) of TBAL, LBA, and DBA was 4.5 : 3.5 : 1.0. The molecular weight is independent of the type and concentration of catalyst. The dependence of the reaction rate and molecular weight on the concentration of the monomer was studied in the presence of DBA and TBAL. In the first case, the order of reaction was found to be 1.7 and 2.6, depending on the impurity concentration, and in the second, it was 2.4. The molecular weight is directly proportional to the monomer concentration. The relative chain-transfer constant C_M^O was determined according to C. H. Bamford et al.

(see below) and found to be less than 0.05 g/dl. On the other hand, the numerical polymerization coefficient P_n is proportional to $[Fd]/[HX]$ (Fd = formaldehyde, HX = acid impurity), and the molecular weight is inversely proportional to the concentration of impurities. The ratio between the concentrations of impurities in formaldehyde and ether was found to be 13. There are 8 figures and 2 tables. The most important English-language references are: H. Mark, A. V. Tobolsky, Physical Chemistry of High Polymeric Systems, New York, 1950, p. 416; C. H. Bamford

Card 2/3

Anionic polymerization of ...

S/190/62/004/005/023/026
B145/B101

et al., The kinetics of vinyl polymerisation by radical mechanisms, London, 1958, p. 232.

ASSOCIATION: Institute of Macromolecular Chemistry, Brno, ^vČSSR

SUBMITTED: September 30, 1961

Card 3/3

37447

S/190/62/004/005/024/026
B101/B144

15 800

AUTHORS: Menčíkova, J., Mejzlik, J., Macháček, Z.

TITLE: Anionic polymerization of formaldehyde. III

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 5, 1962, 776-782

TEXT: The effect of typical impurities of formaldehyde and diethyl ether used as a solvent on the polymerization rate and molecular weight of the polymer was studied in anionic polymerization of formaldehyde. Dibutyl amine or tetrabutyl ammonium laurate were used as catalysts. These impurities fall into four classes: (1) impurities which react neither with the catalyst nor with the active center of polymerization and are therefore ineffective (e.g., CO and O₂); (2) impurities which reduce the molecular weight, but hardly affect the polymerization rate (e.g., H₂O, CH₃OH). They react with formaldehyde to form anions of almost the same basicity as that of the growing anions. Their effect does not depend on the type of catalyst used; (3) impurities which reduce both the molecular weight and the polymerization rate (e.g., HCOOH, CH₃COOH, and CO₂). Their

Card 1/2

Anionic polymerization of ...

S/190/62/004/005/024/C26
B101/B144

effect does not depend on the type of catalyst used, and form less basic anions which stop growing; (4) impurities which reduce, not the molecular weight, but only the polymerization rate (e.g., HCl). An equivalent amount of catalyst is passivated. The following relations were found experimentally: $H_2O : CH_3OH : CO_2 : CH_3COOH : HCOOH = 1 : 3.1 : 21.5 : 21.9 : 23.8$ for the effect on the molecular weight, and $CH_3COOH : HCOOH : CO_2 = 1 : 6.2 : 13.8$ for the effect on the polymerization rate. The activation energy of polymerization in the presence of tetrabutyl ammonium laurate was measured at $-58.5 - -34.9^\circ C$ and found to be 4.1 kcal/mole. The apparent activation energy of the increase in molecular weight is -2.7 kcal/mole. There are 9 figures.

ASSOCIATION: Institute of Macromolecular Chemistry, Brno, CSSR
Institute of Macromolecular Chemistry, Brno, Czechoslovakia

SUBMITTED: September 30, 1961

Card 2/2

L 17207-63

EWP(j)/BDS ASD Pc-4 RM

ACCESSION NR: AP3005973

Z/0009/63/000/000/0433/0436

AUTHOR: Machacek, Zdenek; Mencikova, Jitka

TITLE: Polymerization of formaldehyde in an anhydrous medium catalyzed by halogen anions

SOURCE: Chemicky prumysl, No. 8, 1963, 433-436

TOPIC TAGS: Formaldehyde polymerization, catalysis, quaternary ammonium salt, Li salt, iodide, bromide, chloride

ABSTRACT: Formaldehyde monomer is easily polymerized by both acid and basic catalysts. For polymers of high molecular weights basic catalysts are generally used, mainly quaternary ammonium salts. The authors found previously that tetrabutylammonium laurate has excellent catalytic influence on formaldehyde polymerization; the study described deals with properties of quaternary salts derived from strong inorganic acids HCl, HBr, HI. Tetrabutylammonium chloride, bromide and iodide solutions in diethyl ether at -60°C were studied. Lithium salts of the same acids were also studied in similar conditions. Iodides show the highest catalytic activity, followed by bromides; chlorides are the least active; Li salts have a higher activity than the corresponding tetrabutylammonium salts. The

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L 17207-63

ACCESSION NR: AP3005973

transfer effect of carbon dioxide and formic acid is twice as high with Li salts as with quaternary bases. It was not possible to determine whether this is a specific property of the Li ion, or due to the properties of the transfer agent. "We thank Comrade Macicek for having synthesized the quaternary ammonium salts, and Engineer K. Otto for having determined for us the concentrations of LiBr and LiI in diethyl ether solutions." Orig. art. has 5 figures and 3 tables. 3.

ASSOCIATION: Vyzkumny ustav makromolekularni chemie, Brno (Research Institute of Macromolecular Chemistry)

SUBMITTED: 05 Dec 62

DATE ACQ: 27 Aug 63

ENCL: 00

SUB CODE: CH

NO REF SOV: 000

OTHER: 006

Card 2/2

MACHACEK, Zdenek

"Polymerization with controlled propagation" by Norman G. Gaylord,
Herman F. Mark. Reviewed by Zdenek Machacek. Chem prum 13
no.10:543-544 0 '63.

1. Vyzkumny ustav makromolekularni chemie, Brno.

MACHACEK, Zdenek; FOMIKOVA, Eva

Anionic polymerization of formaldehyde in the presence of
acetic anhydride. Pt.1. Chem prum 14 no.2:75-79 F'64

1. Vyzkumny ustav makromolekularni chemie, Brno.

MACHACEK, Zdenek; FONIOKOVA, Eva

Anionic polymerization of formaldehyde in the presence of acetic anhydride. Pt.2. Chem prum 14 no.5:252-254 My '64.

1. Research Institute of Macromolecular Chemistry, Brno.